

Patent Application No. 09/682,024

**REMARKS**

This Amendment is in response to the Office Action dated March 31, 2004. In the Office Action, claims 1, 3-8, and 10 were rejected under 35 USC §103, and claims 11-14 were rejected under 35 USC §102. By this Amendment, claims 17 and 18 are added. Currently pending claims 1, 3-7, 8, 10-14, 17 and 18 are believed allowable, with claims 1, 8 and 11 being independent claims.

**CLAIM REJECTIONS UNDER 35 USC §103:**

Claims 1 and 3-7 were rejected under 35 USC §103 as obvious over U.S. Patent No. 6,137,479 to Olsen et al. (hereinafter "Olsen") in view of U.S. Patent No. 6,369,794 to Sakurai et al. (hereinafter "Sakurai").

Claim 1 recites, in part, "the displacement detector comprising an image sensor, wherein an image sensed by the image sensor is processed to obtain a displacement of the device itself." The Examiner contends that this limitation is disclosed in Olsen, stating, "Olsen et al., teaches . . . the watch uses an optical sensor to detects changes in the image displayed on a computer display screen. The changes in the displayed image define the data transferred to the watch (column 1, lines 52-55) corresponding to a displacement detector comprising an image sensor, wherein an image sensed by the image sensor is processed to obtain a displacement of the device itself." Office Action, page 8, lines 13-21.

While the Applicant agrees with the Examiner that Olsen discloses an image sensor, it is respectfully submitted that the Examiner's conclusion that Olsen processes the image sensed by the image sensor to obtain a displacement of the device itself is incorrect. Olsen clearly states, "The watch uses an optical sensor to detect changes in the image displayed on a computer display screen. The changes in the displayed image define the data transferred to the watch." Olsen, col. 1, lines 52-55 (emphasis added). Thus, the optical sensor of Olsen is used to transmit data from a computer to a watch, much like an optical communication port. Furthermore, the Examiner's contention that the image sensed by the image sensor is somehow processed to obtain a

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displacement of the watch itself is unsubstantiated by the teachings of Olsen.

Similarly, Sakurai lacks any teaching or suggestion of a displacement detector comprising an image sensor, wherein an image sensed by the image sensor is processed to obtain a displacement of the device itself, as recited in claim 1. Sakurai discloses using acceleration sensors to detect motion of a device. Sakurai, column 7, lines 61-67. By analyzing an acceleration curve output from the acceleration sensors, the device determines whether the user is "swinging" or "tapping" the device. Sakurai, column 8, lines 27-46.

The Application respectfully submits that a *prima facie* obviousness rejection, where the prior art references teach or suggest all the claim limitations, has not been established for claim 1. See MPEP §2143. None of the cited references, either alone or in combination, teach or suggest processing an image sensed by an image sensor to obtain a displacement of the device itself, as claimed in claim 1. For at least this reason, the §103 obviousness rejection of claim 1 should be withdrawn and claim 1 should be allowed.

In making a *prima facie* obviousness rejection, there must be some evidence, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See MPEP §2143. "Broad conclusory statements regarding the teachings of multiple references, standing alone, are not 'evidence.'" *In re Dembicziak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir. 1999).

The Examiner offers as motivation of combining the teachings of Olsen with those of Sakurai ". . . because this would allow the user to interact with the GUI without using other means." Office Action, page 3, lines 14-16. As discussed previously, it is respectfully submitted that the Examiner has not provided evidence as to the desirability of making the specific combination that forms the subject matter claimed. Rather, the Examiner has erroneously construed the teaching of Olsen and Sakurai through impermissible hindsight in view of the present disclosure.

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Finally, to make a *prima facie* obviousness rejection, there must be a reasonable expectation of success. See MPEP §2143. It is respectfully submitted no evidence of a reasonable expectation of success has been presented by the Examiner in combining the teachings of Olsen and Sakurai. Moreover, the trackball device of Olsen and the "shake and tap" method of Sakurai may work to counteract each other by potentially moving the a device cursor away from the user's intended position. Thus, for at least these reasons it is respectfully submitted that a *prima facie* obviousness rejection has not been established by the Examiner for claim 1.

In light of the preceding discussion, claim 1 of the present Application is not obviated by Olsen and Sakurai, and is allowable over the cited art. Furthermore, claims 3-7 and 17 are dependent on and further limit claim 1. For at least this reason, claims 3-7 and 17 are also allowable over the cited art.

Claims 8 and 10 were rejected under 35 USC §103 as obvious over Olsen in view of U.S. Patent No. 6,111,580 to Kazama et al. (hereinafter "Kazama"). Claim 8 recites, in part, "an image sensor, wherein an image sensed by the image sensor is processed to obtain a displacement of the device itself." As discussed above, Olsen does not teach or suggest this limitation of claim 8. It is further submitted that Kazama also does not teach or suggest this limitation. Therefore, for at least this reason, claim 8 is believed allowable over the cited art.

Claims 10 and 18 are dependent on and further limit claim 8. Since claim 8 is believe allowable over the cited art, claims 10 and 18 are also believed allowable over the cited art.

CLAIM REJECTIONS UNDER 35 USC §102:

Claims 11-14 were rejected under 35 USC §102 as anticipated by Sakurai. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP §2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

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Claim 11 recites, in part, "using an image sensor to take an image of a physical object facing the device continuously and detecting a relative displacement between the taken object and the display." Although the Examiner asserts that Sakurai uses an image sensor to detect device displacement, it is respectfully submitted that such an assertion is a mischaracterization of Sakurai.

Sakurai discloses using acceleration sensors to detect motion of a device. Sakurai, column 7, lines 61-67. By analyzing an acceleration curve output from the acceleration sensors, the device determines whether the user is "swinging" or "tapping" the device. Sakurai, column 8, lines 27-46. Sakurai makes no mention of using an image sensor to detect device displacement and the Examiner fails to reconcile such a glaring omission in the cited art.

In the Office Action, the Examiner merely cites a passage in Sakurai (Sakurai, col. 1, lines 43-48) relating to scrolling text or moving a cursor in a display panel in response to a motion sensor. Office Action, page 6, lines 11-18. The Examiner explains that scrolling text or moving a cursor in a display panel in response to a motion sensor corresponds to taking an image of a physical object facing the device continuously and detecting a relative displacement between the taken object and the display and changing a display position of the pointer displayed on the display based on the detected displacement. Office Action, page 6, lines 11-18. Such a conclusion is contradicted by the disclosure of Sakurai and is devoid of any support in the cited art.

Thus, for at least this reason, it is respectfully submitted that an anticipation rejection has not been established by the Examiner for claim 11. Furthermore, claim 11 should be allowed and such allowance is earnestly solicited.

Claims 12-14 are dependent on and further limit claim 11. Since claim 11 is allowable over the cited art, claims 12-14 are allowable over the cited art for at least the same reasons as claim 11.

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NEW CLAIMS:

Claims 17 and 18 added by this Amendment and recite that the image sensor is located in a part of the display. No new matter is introduced by claims 17 and 18 and support for these claims can be found at least at paragraph 39 of the Application.


CONCLUSION

In view of the forgoing remarks, it is respectfully submitted that this case is now in condition for allowance and such action is respectfully requested. If any points remain at issue that the Examiner feels could best be resolved by a telephone interview, the Examiner is urged to contact the attorney below.

No fee is believed due with this Amendment, however, should a fee be required please charge Deposit Account 50-0510. Should any extensions of time be required, please consider this a petition thereof and charge Deposit Account 50-0510 the required fee.

Respectfully submitted,

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